IN THE DRAWINGS

The attached sheets of drawings include changes to Figs. 4, 9, 14, 19, 24, and 29.

These sheets, which include Figs. 4, 9, 14, 19, 24, and 29, replace the original sheets

including Figs. 4, 9, 14, 19, 4, and 29.

Attachment: Replacement Sheets

<u>REMARKS/ARGUMENTS</u>

Favorable reconsideration of this application is respectfully requested.

Substitute Figures 4, 9, 14, 19, 24, and 29 are submitted herewith which now properly recite the phrase "Curvature Of Field". The substitute figures are believed to address the objection to the drawings noted in paragraph 2 of the Office Action.

Also, applicants note several Information Disclosure Statements (IDSs) were filed in this present application and at this time have not been acknowledged as considered. Specifically, Information Disclosure Statements were filed on April 17, 2002, May 2, 2002, August 26, 2002, October 30, 2002, December 31, 2002, and March 20, 2003. For convenience a copy of those properly filed IDSs and their date-stamped filing receipts are submitted herewith. Applicants request confirmation of consideration of the references cited in those IDSs by returning to applicant initialed forms PTO-1449 acknowledging consideration of the references.

Claims 1-22 are pending in this application. Claims 1-3, 5-9, and 15 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. patent 6,445,483 to <u>Takada et al.</u> (herein "<u>Takada</u>"). Claim 4 was rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Takada</u>. Claims 10, 12, 14, and 16 were rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Takada</u> in view of U.S. patent 6,046,835 to <u>Yamawaki et al.</u> (herein "<u>Yamawaki</u>"). Claims 11 and 13 were rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Takada</u> in view of U.S. patent 6,130,768 to <u>Ono</u>. Claims 17, 18, 20, and 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Takada</u> in view of <u>Yamawaki</u> as applied to claims 1, 14, and 16, and further in view of U.S. patent 5,305,022 to <u>Ota et al.</u> (herein "<u>Ota</u>"). Claims 19 and 21 were rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Takada</u> in view of <u>Ota</u>.

Addressing each of the above-noted rejections, each of these rejections is traversed by the present response.

Each of the above-noted rejections relies upon <u>Takada</u> as the primary reference, and also particularly relies upon <u>Takada</u> to disclose first and second scanning lenses in lenses 12 and 13.

First, applicants note <u>Takada</u> employs a special configuration in which an optical scanning device makes light incident twice on a rotatable scanner (polygon mirror). As disclosed in <u>Takada</u> at column 2, line 20 *et seq.* such a configuration is applied for solving a problem that only one deflection results in an increase in beam diameter on a polygon mirror, and therefore it is necessary to enlarge the size of a reflective surface of the polygon mirror to receive the entire beam when the polygon mirror is rotated.

According to <u>Takada</u>, since the configuration of twice incidence light is applied, transfer optics are required. Accordingly, in such a scanning optical system of <u>Takada</u> employing such a configuration of the optical scanning device, applicants submit the two-lens configuration (lenses 12 and 13) cannot be considered in isolation, but the entire configuration including the transfer optics must be considered as a whole. In this case, according to <u>Takada</u>, a three-lens configuration is applied, and thus the configuration of the optical scanning system of <u>Takada</u> differs from that of the claimed invention.

In addressing the above-noted positions, which were also presented in the previous response, the outstanding Office Action states:

> With regard to Applicants' arguments that Takada employs a configuration of the optical scanning device where "the entire configuration including the transfer optics must be considered as a whole" along with the first and second scanning lenses 12 and 13, that would make the three-lens configuration of Takada different from the claimed invention, the Examiner respectfully disagrees. The transfer optics (lenses 7, 9 and 10) of Takada are solely used for re-focusing and/or converging the light beam in the sub-scanning direction in the vicinity of the reflecting surface of the polygon mirror (3) and are not part of the scanning image forming lenses (12 and 13), which have specific characteristics for achieving a constant velocity function and a conjugating function for compensating for a tilt or positional error of the reflecting plane of the polygon mirror.

4

> Therefore, the transfer optic could not be considered as part of lenses necessary for forming image on the surface to be scanned.[1]

In response to the above-noted position, applicants respectfully submit that the transfer optics, lenses 7, 9, and 10, in <u>Takada</u> are in fact not solely used for re-focusing and/or converging the light beam in the sub-scanning direction, but that conversely those lenses do form part of the scanning image forming system. In that respect applicants draw attention to <u>Takada</u> at column 13, lines 32-34 which states "the beam b and the second reflecting surface will move by the same amount when the polygon mirror 3 rotates". Thus, according to <u>Takada</u> the beam b once reflected is again reflected by the polygon mirror, and thus becomes the beam c that produces a scan line on the surface 14. Thus, in <u>Takada</u> that beam b passing through the optics 7, 9, and 10 in <u>Takada</u> is utilized in the scanning beam, and the optics 7, 9, 10 are not merely directed to a re-focusing and/or converging of the light beam in the vicinity of the reflecting surface of the polygon mirror.

Further, <u>Takada</u> states at column 17, lines 51-53 that "[h]ence, the optical beam a is deflected by twice the value θ on the first reflecting surface 4 of the rotating polygon mirror 3". <u>Takada</u> further states at column 17, line 64 through column 18, line 1 that "[s]ince the optical beam b has been deflected in such a direction that the angle of its incidence on the second reflecting surface 5 of the polygon mirror is increased by angle θ2, the optical beam c reflected from the second reflecting surface 5 will be deflected by 2θ1 + 2θ2".

In view of that further teaching in <u>Takada</u>, to produce the scan line on the surface 14 it is necessary to deflect the light beam by 2θ1 + 2θ2. Thereby, in <u>Takada</u> at the least if the transfer optic 7 is removed from the optical scanning apparatus of <u>Takada</u> it is not possible to create the above-mentioned angle 2θ1 + 2θ2 necessary to produce the scan line.

---

[1] Office Action of November 5, 2004, the paragraph bridging pages 9 and 10.

In such further ways, the optics 7, 9, and 10 in <u>Takada</u> are a necessary and critical part of the scanning optics in <u>Takada</u>; thereby the optics 7, 9, and 10 do not play only an isolated role in re-focusing and/or converting the light beam in the sub-scanning direction in the vicinity of the reflecting surface of the polygon mirror, as is the basis for the outstanding rejection. In such ways, applicants respectfully submit it is clear to one of ordinary skill in the art that the transfer optics 7, 9, and 10 in <u>Takada</u> function organically in cooperation with the lenses 12 and 13 to produce the scan line.

Therefore, applicants respectfully submit the basis for the outstanding rejection as to its reliance upon <u>Takada</u> is improper. Thus, each of the claims are believed to clearly distinguish over the teachings in <u>Takada</u>.

Moreover, no teachings in the further cited references to <u>Yamawaki</u>, <u>Ono</u>, or <u>Ota</u> are believed to overcome the above-noted deficiencies in <u>Takada</u>.

In such ways, the claims as currently written are believed to distinguish over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
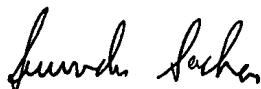
Gregory J. Maier
Attorney of Record
Registration No. 25,599

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413-2220

Surinder Sachar